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Skylab/BREP Monthly Report for the Month of June, 1973
Project # SR397 Contract # NAS 9-13301

Activities during the month of June, 1973 were concerned with the coordination of surface observation and aircraft data acquisition activities in conjunction with the SL-2 overpass of one of the subject projects test sites. Preliminary indications indicate that an excellent set of data were obtained during this reporting period.

(A) Overall Status

A data set of potentially high quality was obtained by the Skylab space station over a previously identified test site on June 10, 1973. At the time of the Skylab overpass a field spectroradiometer system that had been prepared by the Laboratory was in position on the Salt Creek boat ramp of Lake Monroe in Monroe County, Indiana, one of the test sites identified in the subject project. Nearby the field spectroradiometer an instrumentation station acquired solar and meteorological data several hours before and after the overpass of the Skylab. A C-47 aircraft operated by ERIM equipped with the M-7 multispectral scanner and supporting photographic equipment overflew the Lake Monroe test site within a few minutes of the overpass of the Skylab, and approximately two hours later the same test site was overflown by the RB-57 aircraft operated by NASA at an altitude of 60,000 ft. Approximately 24 hours earlier the test site was in the field of view of the ERTS satellite thus producing a multi-level data set acquired in very close time proximity. In addition to the objectives outlined in the subject proposal, it appears as though a detailed sensor comparison study is now possible with this unique data set. Weather conditions were excellent in the vicinity of the test site and assuming that all instruments were functioning properly, a data set of extremely high quality is expected.

(B) Scientific Recommendations

No recommendations are being made during this reporting period since the data that was acquired will not be available for processing for some time and the surface observation data processing will not be finished until the next reporting period.

(C) Expected Accomplishments During the Next Reporting Period

The data from the field spectroradiometer that were acquired during the June 10, 1973 overpass will be processed during the next reporting period. In addition the atmospheric profile data

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(E74-10472) [SPECTRORADIOMETRIC
MEASUREMENTS OF LAKE MONROE, INDIANA]
Monthly Report, Jun. 1973 (Purdue Univ.)
2 p HC \$4.00

Monthly Report
June, 1973

will be generated from the surface meteorological observations that were made during the day of the overpass. The Skylab data is not expected to be available during the next reporting period, but it is possible that the data from the ERTS overpass will be available at the end of the next reporting period. If this be the case, preliminary analysis of this data set will take place.

(D) Results

No significant results are reported since the data for analysis is not yet available during this reporting period.

(E) Travel Summary and Plans

Travel to the Monroe Reservoir test site in order to set up the surface observation systems was made during the month of June, 1973. In addition, a post-flight visit to the test site was made in order to reconfirm surface observations made during the June 10th overflight. Photographic documentation of each setup point in the test site area was detailed.

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